

ATTACHMENT 3

INSPECTIONS

Table of Contents

1.0	Introduction	1
2.0	Frequency of Inspections	1
2.1	Daily	1
2.2	Weekly	2
2.3	Monthly	2
2.4	Quarterly	2
2.5	Annual	3
2.6	Other	3
3.0	Types of Problems	4
3.1	Containers	4
3.2	Tanks	5
3.3	Incinerator	6
3.3.1	Instruments	6
3.4	Sumps and Secondary Containment Areas	7
3.5	Closed Vent Systems and Carbon Adsorbers	8
3.6	Other Areas	8
4.0	Corrective Action	8
5.0	Inspection Matrix	9

1.0 Introduction

The inspections outlined in this Attachment are the minimum required. All inspections required by this permit will be documented on forms and maintained as part of the operating record. Those forms are not included in this Attachment, but a list of all required inspection items, frequencies, and what is being inspected is included as an Inspection Matrix. Although the format of the inspection forms may change, all items on the Inspection Matrix will be included on the forms and inspected.

This Inspection Attachment addresses those areas that store and or treat hazardous waste or have the potential to come in contact with hazardous waste. It addresses mainly the lab and areas south of Main Street. It also includes inspection items which pertain to the Aragonite facility's ability to respond quickly to a spill, fire, explosion and/or natural disaster.

All inspections are documented and the documentation is kept in the vault in the administration building. Reports may be maintained electronically or be microfilmed with the on-site capability to produce a legible hard copy. All inspection forms will note the day, the inspector's name, the time of the inspection, any deficiencies found or corrective action taken and the work order number which indicates that a repair request has been submitted to the maintenance department. If the repair is minor and the inspector can fix it (such as by replacing a sign, or getting another fire extinguisher) the notation of what was done will be made on the form rather than referencing a work order number. All items on the inspection logs will be filled in (i.e., no blanks). If a particular item is not applicable for some reason, it will be noted on the form along with the reason. Actual gauge readings from inspected apparatus where gauges are present or readings are taken will be noted on the inspection logs.

2.0 Frequency of Inspections

The Inspection Matrix specifies the minimum frequency of inspection for each required item. The following outlines the basis for the frequencies specified in the Inspection Matrix.

2.1 Daily

- Loading and unloading areas when in use.
- Aboveground piping visually inspected for leaks.
- Tank systems for leaks, leaking pumps, leaking piping, gauge readings, data gathered from the leak detection equipment, monitor printouts, equipment operation, waste levels, emission control equipment, indications of leaks or spills, use of overflow equipment, detect corrosion, secondary containment integrity,

seal pot liquid level above the bottom of pipe to form a seal, and nitrogen blanket on tank. Spills/leaks must be cleaned up with 24 hours.

- Welded flanges, joints, connections.
- Tank monitoring equipment.
- Inspect incinerator and associated equipment (e.g. pumps, valves, conveyors, pipes, etc.) for leaks, spills, fugitive emissions, deterioration, excessive wear, and signs of tampering.
- Visually inspect the incinerator monitoring instrumentation for out of tolerance and/or recorded operational data.
- Kiln combustion air system.
- Continuous Emissions Monitoring System.
- Temperature in refrigerated trailers when in use.
- Cylinder storage area when in use.
- Cylinder feed station when in use.
- Drum pumping storage area when in use.
- Drum pumping station when in use.

2.2 Weekly

- Carbon vent systems
- Condensation traps
- Fire pump check
- Emergency generator check
- Eyewash and showers
- Perimeter lights, signs on fence, fence
- Containers and containment systems
- Test alarm system
- Carbon vent systems

2.3 Monthly

- Fire Extinguishers
- Tank secondary containment system for indications of cracks, gaps, and peeling of the epoxy sealant.

2.4 Quarterly

- Potable water system check must be done for the Utah Division of Drinking Water.

- Spill kit inspection. The required spill kits and contents of each kit are outlined in the Preparedness and Prevention Plan (Attachment 5). If used, the kits must be fully restored prior to being placed in-service. The kits will also be inspected once per quarter to insure their integrity.
- Evacuation drills.

2.5 Annual

- All of the blend and aqueous tanks will be emptied and inspected annually for the general condition and to measure the corrosion of each tank.
- The closed vent system between the bulk solids building, the shredder, the apron feeder, the sludge receiving tank and the inlet to the ID fans (both kiln/ABC combustion air fans and the carbon adsorption system ID fan) will be inspected initially and annually thereafter for holes, gaps, loose connections, etc. that could lead to air pollution emissions.
- The duct work sections between the carbon adsorption system ID fan (K-401) and the carbon adsorbers, and between the combustion air fans (K-101 and K-102A/B) and the incinerator will be monitored initially and annually thereafter by EPA Method 21 to ensure there are “no detectable emissions” (no readings greater than 500 ppm above background levels). All components and connections will be visually inspected each year after the initial monitoring to check for defects that could lead to air emissions. Any components that are repaired or replaced will be monitored to ensure that it operates with no detectable emissions.
- The sludge receiving tank fixed roof and its closure devices will be inspected initially and annually thereafter for defects such as cracks, holes, gaps, broken, cracked, or otherwise damages seals, broken or missing hatches, access covers, caps, or other closure devices, etc.

2.6 Other

- When the hydrocarbon vent system carbon canisters are in operation, they must be monitored every 3 hours for breakthrough.
- The direct burn vessel (DBV), the direct burn tanker systems, and the drum pumping station must be inspected at least once each operating hour when hazardous waste is being transferred from the DBV, direct burn tanker, or container in the drum pumping station to the kiln.
- The sludge and bulk solids tanks will be emptied and inspected every four years for the general condition and to measure the corrosion of each tank.

3.0 Types of Problems

The personnel conducting the inspections shall be trained on the types of problems they should be looking for. The Inspection Matrix briefly outlines the types of problems that will be looked for. However, more detailed, written instructions describing what the inspector should look for, the acceptable criteria (e.g., gauge readings, liquid levels, valve positions, etc.), and the proper notation to be placed on the inspection log (e.g., "ok", "x", "clean", "out-of-service", etc.) for each inspection item will also be used by the inspectors. These instructions may be specified on the form itself, or they may be specified in instructions which will accompany the applicable log.

The following sections outline some of the items that will be looked for during the inspections. Additional detail will be included in the instruction book and communicated to the inspectors. These instructions shall be developed with sufficient detail to avoid inconsistencies and confusion between inspections and log entries between different inspectors. These instructions will be in place for all items on the Inspection Matrix.

Any item currently out-of-service or active work orders will be listed on the backlog list maintained by maintenance and on the inspection forms. A historical list of out-of-service items or work orders will also be maintained on paper or electronically.

3.1 Containers

Hazard labels, AG barcode labels with green acceptance labels or marks on the barcode, which are required for storage of the containers, are inspected. Unique barcode labels (identified by "REPACK" or "CONS" (for consolidate) on the barcode) are used for repacks and the green label or mark on the barcode is not required. Any labels that have fallen off are replaced. Label deficiency is noted on the weekly form and corrected in-place.

The drums and containers are inspected to ensure that the lids and bungs are in place.

The containers are inspected for signs of corrosion. The drum will be overpacked if it has lost its integrity.

Drums are inspected for leaks. If a leak is found, the source of the leak is determined. The contents may be transferred to another suitable container. Absorbent is used to contain and cleanup the spilled liquid. As an alternative, the container may be overpacked into a salvage drum.

The stacking of containers is inspected to ensure stability. There is also a check for the minimum required aisle space.

Compressed gas cylinders are checked for leakage daily by walkthrough monitoring with a photo ionization detector and color indicating tubes.

3.2 Tanks

Tanks are inspected to determine that the overflow has not been used, the seal pot has integrity, and nitrogen is blanketing the tank farm tanks and sludge storage tank (T-401). Tank level is checked to determine compliance with the capacity limitations.

Each tank is inspected once per day to detect corrosion or erosion and leaking of fixtures or seams.

The overfilling control equipment is inspected visually every day. The seal pot is checked to determine if liquid level is above the discharge pipe which maintains the seal. The tank and its auxiliary equipment, i.e., pump, levels, piping, valves, seals, etc. will be checked.

Equipment used to off-load, such as hoses and couplings, are visually inspected after each use. The unloading bay is sufficient to contain a tanker spill in case of ultimate failure by a hose. The hose will be replaced on any visual indication of a leak.

Data collected on all monitoring equipment, such as pressure gauges, level indicators, etc. is logged each day to ensure that the tank is operating according to design specifications and operation procedures. Plant maintenance is responsible for all calibration.

The level of waste in each tank (including bulk solids) is checked at least once each day to ensure that the tanks have not exceeded their permitted capacity.

The bulk solids tanks are in a building. Inside the tanks and the areas above the tanks within the internal walls of the building are treated as a confined space. There is a walkway that runs under the bulk solids tanks. The tanks set on 12" beams. The inspector will walk underneath the bulk solids tanks and check for leaks under the three tanks: T-403; T-404A and T-404B. The inspector illuminates the area under each tank to look for leaks. If there are any leaks, a spill report will be prepared. If the leak came from a tank, then the tank will be declared out-of-service and the contents of the leaking tank will be transferred to another bulk solids tank.

The blend liquids and aqueous tanks are emptied and visually inspected and the shell thickness measured annually. A similar inspection and measurement of the sludge and bulk solids tanks is conducted at least once every four years. A report of these inspections will be retained on-site.

All the tanks (except the bulk solids tanks, T-403, T-404A and B, and the sludge receiving tank, T-406) contain manways to allow access for visual inspections. Tank entry procedures will conform to OSHA standards for confined space entry.

Should the tank be found defective, it will be taken out of service and repaired and/or replaced. Defective is defined as a leak, bulge, or a split seam.

3.3 Incinerator

The inspection schedules for the incinerator are included in this section. The waste feed flow is recorded continuously as are the combustion parameters, such as air, oxygen, temperature, etc. Also, parameters that are mandated in the permit will be monitored at the frequency specified.

Daily inspections at the incinerator will be conducted for all equipment associated with the incinerator train, material feed systems, process and residue handling system. The inspector will check for leaks or spills, fugitive emissions, and signs of tampering. Any evidence of leaking must be reported to the shift supervisor as a possible indication of a worn seal.

The emergency waste feed cut-off controls and alarms will be tested every 168 operating hours. The test is detailed in Attachment 12.

3.3.1 Instruments

The instrument checklist is signed off by a shift supervisor daily. All of the instruments critical to monitoring the incinerator and gas cleaning process are included on the checklist. These are listed on the Inspection Matrix. The supervisor signs off that the instrument is in good working order.

Typically, the shift supervisor and operators will be looking for the following indications of faulty instruments:

Thermocouples. The transmitters are set up to have the 4-20 ma signal fail low if the thermocouple breaks and fail high if the transmitter fails. In either case, the signal will show in the plant control system as "BAD" and provide a "SENSOR" alarm. Various other conditions could cause the reading to drift. An instrument will be checked if the variation in reading between any two instruments is greater than 10% of the lower value.

Oxygen Probes. These instruments will generally fail high. By comparison to each other and the oxygen probe in the stack, response of each instrument to the process, and visual examination of process conditions, a determination can be made of which instrument is reading correctly.

Pressure Transmitters. If the transmitter fails, the signal should fail to the low end of the span. If the measuring diaphragm is damaged, then the signal should read zero,

which may not be the low end of the span. If the sensing line is plugged, then the signal will not vary during changing process conditions. The process can also be used to determine if a pressure instrument has failed by comparison to other pressure instruments in the process.

Flame Sensors. These will fail open indicating no flame. Since each BMS has two flame sensors both would have to fail during running to trip the BMS. In the process of relighting the burner, the bad flame sensor would be found.

Pressure Switches. Failure of these devices can only be determined by process conditions. A specific action is expected under certain process conditions. If that does not occur, then the switch is considered bad.

Magnetic Flowmeters. These instruments are set to fail low when the signal strength fails. The instruments would be reading correctly otherwise.

pH Probes. Deposit build-up on the probe can cause the reading to respond very slowly or even not at all.

WESP Power Instruments. These instruments will fail low. If the WESP powers up and stays on-line yet the instruments read low then they should be checked. The readings can also be compared to the panel meters on the WESP control panels.

3.4 Sumps and Secondary Containment Areas

Sumps are inspected daily to determine if they contain liquids or other material. The locations of the sumps subject to these inspection requirements are found on Drawing D-034-M-002 SP in Attachment 10.

If a sump, drip pan, or secondary containment area contains any material, it will be emptied within 24 hours of discovering the contents. This means that all material, liquid and/or solid, will be removed. If ongoing precipitation prevents the emptying of all material from a sump or secondary containment system located outside of a building, the sump or secondary containment system will be emptied within 24 hours of the end of the precipitation event. If this occurs, an explanation to this effect, and the time and date of the end of the precipitation event will be noted on the inspection forms. However, sufficient material must be removed during the event to maintain sufficient secondary containment capacity of the system. Solid material which accumulates in sumps inside buildings from the routine processing of containers (e.g., dried mud falling off of pallets, small pieces of wood from pallets, dust, etc. (but not spill material)) will be noted on the daily inspection forms but may be removed weekly.

Any material removed will be managed as a hazardous waste except for liquid collected in sumps SP-614A, B, C, and D and their associated bermed areas which is returned to the neutralization system for use in the process. It will follow the management procedures as outlined in the Waste Analysis Plan (Attachment 1).

3.5 Closed Vent Systems and Carbon Adsorbers

The combustion air ductwork and the ductwork for the backup carbon adsorbers will be visually inspected annually. The inspections will look for leaks, holes, cracks, gaps, etc. which could lead to emissions from the ductwork and the carbon adsorption vessels.

3.6 Other Areas

Safety and security inspections are made of the fence, locks, fire extinguishers, alarms, eyewash stations and showers. In addition, the fire pumps, both electric and diesel are started-up and checked for operability. The emergency generator is also started-up with oil and gas checks for operability. Drawing D-034-M-005 in Attachment 10 specifies the location of this equipment.

Two spill kits are located at opposite ends of the plant. There will also be one located for the container management buildings (in building E-4). Each kit is inspected for complete inventory. If the seal is broken, the inventory sheet is checked, initialed and placed back in the spill kit. A quarterly check will be made to determine integrity of the contents of the spill kit.

4.0 Corrective Action

All items on the inspection logs will have a notation of their status (i.e., blanks will not be used to indicate that an item was acceptable or that the status had not changed). If the status is not acceptable, there will be a notation of the corrective actions performed (if it can be fixed immediately) or a reference to a work order if additional work needs to be done.

The method of documenting that a request for repair has been made is through the work order system. That same system is also used to indicate when the work has been completed. The form itself may change but will contain sufficient information to be able to clearly track all the work completed.

All work orders will clearly indicate the work that was performed. It will also indicate who performed the work. It will also clearly indicate that all of the required work is completed and the date of completion. If some of the work is done but additional work is needed, this will be noted on the work order or reference additional work orders.

Any malfunction or deterioration discovered by an inspection shall be corrected within 72 hours. If the remedy requires more time, Clean Harbors Aragonite will submit to the Executive Secretary, before the expiration of the 72-hour period, a proposed time schedule for correcting the problem. All corrective actions will be completed in a timely manner. Until the problem is corrected, the equipment will be declared out-of-service. This will be noted on the inspection logs.

For purposes of these reporting requirements, deterioration shall be reported to the Executive Secretary when it has proceeded to such an extent as to make the device inoperable or unable to function according to its intended purpose. However, all deterioration leading to this final state shall be noted on the appropriate inspection forms and reported internally so that corrective action will be taken when necessary.

If a problem is discovered during an inspection where a hazard to human health or the environment is imminent or has already occurred, remedial action shall be taken immediately.

If a tank is determined to be unfit for use, it will be removed from service immediately and emptied. If the nitrogen blanket is removed the tank must be isolated from the fume management system.

5.0 Inspection Matrix

The items that will be inspected, the frequency of inspection, and a brief description of what is being inspected is contained in this section.

INSPECTION MATRIX

Inspection Item	Minimum Frequency	Types of Problems
Laboratory		
lab refrigerators and freezers	Daily	Operable, correct temperature
lab instrument eyewashes	Weekly	Operable
lab instrument showers	Weekly	Operable
lab sample prep eyewashes	Weekly	Operable
lab sample prep showers	Weekly	Operable
Container Buildings (E-1, E-2, E-3, E-4, E-5, E-6, E-7)		
E-1 sump and sump in each bay (B-3, B-4, B-5)	Daily	Empty
E-1 sump at dock (SP-625)	Daily	Empty
E-1 loading/unloading area	Daily when in use	Leaks, spills
E-1 loading/unloading area	Monthly	Visually free of cracks, gaps, damage
E-1 debris drum	Weekly	Closed, labeled, dated, <90 days
E-1 aisles	Weekly	Adequate
E-1 containers	Weekly	Bulging, leaking, corroding
E-1 containers	Weekly	Proper placement and stacking
E-1 containers	Weekly	Closed, bungs in
E-1 containers	Weekly	Labels intact and legible
E-1 pallets	Weekly	Provide 4" clearance
E-1 eyewashes	Weekly	Operable

Inspection Item	Minimum Frequency	Types of Problems
E-1 showers	Weekly	Operable
E-1 alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible
E-1 waste segregation	Weekly	Incompatible check
E-1 floor, berms	Monthly	Visually free of cracks, gaps, damage
E-1 carbon filters	Weekly	Operable, carbon level, free of plugging, breakthrough
E-2 sumps	Daily	Empty
E-2 alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible
E-2 aisles	Weekly	Adequate
E-2 containers	Weekly	Bulging, leaking, corroding
E-2 containers	Weekly	Proper placement and stacking
E-2 containers	Weekly	Closed, bungs in
E-2 containers	Weekly	Labels intact and legible
E-2 pallets	Weekly	Provide 4" clearance
E-2 eyewashes	Weekly	Operable
E-2 showers	Weekly	Operable
E-2 waste segregation	Weekly	Incompatible check
E-2 floor, berms	Monthly	Visually free of gaps, cracks, damage
E-2 repack carbon filter	Weekly	Operable, carbon level, free of plugging, breakthrough
E-3 sumps	Daily	Empty
E-3 alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible

Inspection Item	Minimum Frequency	Types of Problems
E-3 aisles	Weekly	Adequate
E-3 containers	Weekly	Bulging, leaking, corroding
E-3 containers	Weekly	Proper placement and stacking
E-3 containers	Weekly	Closed, bungs in
E-3 containers	Weekly	Labels intact and legible
E-3 pallets	Weekly	Provide 4" clearance
E-3 eyewashes	Weekly	Operable
E-3 showers	Weekly	Operable
E-3 waste segregation	Weekly	Incompatible check
E-3 floor, berm	Monthly	Visually free of cracks, gaps, damage
E-4 alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible
E-4 aisles	weekly	Adequate
E-4 containers	Weekly	Bulging, leaking, corroding
E-4 containers	Weekly	Proper placement and stacking
E-4 containers	Weekly	Closed, bungs in
E-4 containers	Weekly	Labels intact and legible
E-4 pallets	Weekly	Provide 4" clearance
E-4 eyewashes	Weekly	Operable
E-4 showers	Weekly	Operable
E-4 decant eyewash/shower	Weekly	Operable
E-4 repack eyewash/shower	Weekly	Operable

Inspection Item	Minimum Frequency	Types of Problems
E-4 waste segregation	Weekly	Incompatible check
E-4 floor, berms	Monthly	Visually free of cracks, gaps, damage
E-4 sump at dock (SP-627)	Daily	Empty
E-4 decant LEL/O ₂ alarms	Monthly	Calibrate, alarms audible
E-4 repack LEL/O ₂ alarms	Monthly	Calibrate, alarms audible
E-4 decant LEL/O ₂ alarms	Weekly	Instruments operable
E-4 repack LEL/O ₂ alarms	Weekly	Instruments operable
E-4 decant carbon filters	Weekly	Operable, carbon level, free of plugging, breakthrough
E-4 repack carbon filters	Weekly	Operable, carbon level, free of plugging, breakthrough
E-5 alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible
E-5 aisles	Weekly	Adequate
E-5 containers	Weekly	Bulging, leaking, corroding
E-5 containers	Weekly	Proper placement and stacking
E-5 containers	Weekly	Closed, bungs in
E-5 containers	Weekly	Labels legible and intact
E-5 pallets	Weekly	Provide 4" clearance
E-5 eyewashes	Weekly	Operable
E-5 showers	Weekly	Operable
E-5 waste segregation	Weekly	Incompatibility check
E-5 floor, berms	Monthly	Visually free of cracks, gaps, damage

Inspection Item	Minimum Frequency	Types of Problems
E-5 sump and sump in each bay (B-1, B-2, B-6)	Daily	Empty
E-5 sump at dock (SP-619)	Daily	Empty
E-5 loading/unloading area	Daily when in use	Leaks, spills
E-5 loading/unloading area	Monthly	Visually free of cracks, gaps, damage
E-5 carbon filter	Weekly	Operable, carbon level, free of plugging, breakthrough
E-6 sumps	Daily	Clean and dry
E-6 alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible
E-6 aisles	Weekly	Adequate
E-6 containers	Weekly	Bulging, leaking, corroding
E-6 containers	Weekly	Proper placement and stacking
E-6 containers	Weekly	Closed, bungs in
E-6 containers	Weekly	Labels intact and legible
E-6 pallets	Weekly	Provide 4" clearance
E-6 eyewashes	Weekly	Operable
E-6 shower	Weekly	Operable
E-6 waste segregation	Weekly	Incompatibility check
E-6 floor, berm	Monthly	Visually free of cracks, gaps, damage
E-7 sumps	Daily	Empty
E-7 aisles	Weekly	Adequate
E-7 alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible

Inspection Item	Minimum Frequency	Types of Problems
E-7 containers	Weekly	Bulging, leaking, corroding
E-7 containers	Weekly	Proper placement and stacking
E-7 containers	Weekly	Closed, bungs in
E-7 containers	Weekly	Labels intact and legible
E-7 pallets	Weekly	Provide 4" clearance
E-7 eyewashes	Weekly	Operable
E-7 showers	Weekly	Operable
E-7 waste segregation	Weekly	Incompatibility check
E-7 floor	Monthly	Visually free of gaps, cracks, damage
E-7 LEL Alarm	Monthly	Calibrate, alarm audible
E-7 LEL Alarm	Weekly	Instrument operable
Breezeway		
Breezeway sump SP-626	Daily	Empty
Breezeway aisles	Weekly	Adequate
Breezeway eyewash	Weekly	Operable
Breezeway shower	Weekly	Operable
Breezeway alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible
Breezeway floor, berms	Monthly	Visually free of cracks, gaps, damage
Breezeway containers	Weekly	Bulging
Breezeway containers	Weekly	Leaking, corroding
Breezeway containers	Weekly	Closed, bungs in

Inspection Item	Minimum Frequency	Types of Problems
Breezeway containers	Weekly	Labels intact and legible
Breezeway waste segregation	Weekly	Incompatibility check
Breezeway pallets	Weekly	Provide 4" clearance
E-1, E-5, E-4 Receiving Docks - Refrigerated Trailers		
Refrigerated trailer containers	Weekly	Bulging, leaking, corroding
Refrigerated trailer containers	Weekly	Proper placement and stacking
Refrigerated trailer containers	Weekly	Closed, bungs in
Refrigerated trailer containers	Weekly	Labels intact and legible
Refrigerated trailer pallets	Weekly	Provide 4" clearance
Refrigerated trailer aisles	Weekly	Adequate
Refrigerated trailers	Daily	Temperature $\leq 40^{\circ}\text{F}$
Gas cylinder storage area		
Cylinder storage area cylinders	Daily	Bulging, leaking, corroding
Cylinder storage area cylinders	Weekly	All cylinders capped
Cylinder storage area cylinders	Weekly	Barcodes/labels intact and legible
Cylinder storage area segregation	Weekly	Incompatibility check
Cylinder storage area	Weekly	All barriers and signs in place
Cylinder storage area	Weekly	Area clear of combustible waste and vegetation
Gas cylinder feed station		
Cylinder feed station cylinders	Daily	Bulging, leaking, corroding

Inspection Item	Minimum Frequency	Types of Problems
Cylinder feed station cylinders	Weekly	All cylinders capped
Cylinder feed station cylinders	Weekly	Barcodes/labels intact and legible
Cylinder feed station fittings	Daily (when in use)	Leaks, visible damage
Cylinder feed station hoses	Daily (when in use)	Leaks, visible damage
Cylinder feed station lance assembly	Daily (when in use)	Leaks, visible damage
Cylinder feed station shower/eyewash	Weekly	Operable
Cylinder feed station LEL Alarm	Monthly	Calibrate, alarm audible
Cylinder feed station LEL Alarm	Weekly	Instrument operable
Gas cylinder feed station glove box		
Cylinder feed station glove box doors, north	Daily (when in use)	Leaks, visible damage
Cylinder feed station glove box doors, north	Weekly	Operational check
Cylinder feed station glove box doors, south	Daily (when in use)	Leaks, visible damage
Cylinder feed station glove box doors, south	Weekly	Operational check
Cylinder feed station glove box seals	Daily (when in use)	Leaks, visible damage

Inspection Item	Minimum Frequency	Types of Problems
Cylinder feed station glove box lexan	Daily (when in use)	Leaks, visible damage
Cylinder feed station glove box safety latches, north	Daily (when in use)	Visible damage
Cylinder feed station glove box safety latches, south	Daily (when in use)	Visible damage
Cylinder feed station glove box lance assembly	Daily (when in use)	Leaks, visible damage
Drum pumping storage		
Drum pumping storage secondary containment	Daily (when in use)	In place, empty
Drum pumping storage barriers	Daily (when in use)	In place, damage
Drum pumping storage aisles and access	Weekly	Adequate
Drum pumping storage containers	Weekly	Bulging, leaking, corroding
Drum pumping storage containers	Weekly	Proper placement
Drum pumping storage containers	Weekly	Closed, bungs in
Drum pumping storage containers	Weekly	Labels intact and legible
Drum pumping storage waste segregation	Weekly	Incompatibility check
Drum pumping storage portable secondary containment	Monthly	Visually free of damage
Drum pumping storage pad	Monthly	Check for cracks, damage

Inspection Item	Minimum Frequency	Types of Problems
Drum pumping station		
Drum pumping station containers/educt system and waste feed system pump and piping integrity	Hourly (when in use)	Spill control equipment, corrosion, erosion, other damage/deterioration, releases, gauge readings
Drum pumping station secondary containment	Daily (when in use)	Empty
Drum pumping station containers	Weekly	Bulging, leaking, corroding
Drum pumping station containers	Weekly	Closed, bungs in
Drum pumping station containers	Weekly	Labels intact and legible
Drum pumping station containers	Weekly	Incompatibility check
Drum pumping station secondary containment	Monthly	Check for cracks/gaps/damage
Drum pumping station LEL Alarm	Weekly	Instrument operable
Drum pumping station LEL Alarm	Monthly	Calibrate, alarm audible
CO ₂ fire suppression system	Daily (when in use)	Isolation valve open, cylinder charged and connected
Drum pumping station glove box doors	Daily (when in use)	1" WC vacuum, visible damage
Drum pumping station glove box lexan	Daily (when in use)	1" WC vacuum, visible damage
Drum pumping station glove box seals	Daily (when in use)	1" WC vacuum, visible damage

Inspection Item	Minimum Frequency	Types of Problems
Drum pumping station grounding	Daily (when in use)	Good connections, deterioration
Direct Burn Vessel and Tanker Systems		
Direct burn vessel and piping integrity	Hourly (when in use)	Spill control equipment, corrosion, erosion, releases, gauge readings
Direct burn vessel berm floor and berm	Monthly	Check for cracks/gaps/damage
Direct burn vessel interior inspection	Annual	Inspect interior of each direct burn vessel for pitting, corrosion, general condition, thickness
Drive through direct burn tanker, piping integrity and pump system	Hourly (when in use)	Spill control equipment, corrosion, erosion, releases, gauge readings
Drive through direct burn station secondary containment	Monthly	Check for cracks/gaps/damage
Drive through direct burn tanker/containers	Weekly (when not in use)	Leaking, deterioration
Drive through direct burn station	Daily (when in use)	Check for the presence of combustible debris
Drive through direct burn station eyewash	Weekly	Operable
Drive through direct burn station shower	Weekly	Operable
Truck unloading direct burn tanker, piping integrity and pump system	Hourly (when in use)	Spill control equipment, corrosion, erosion, releases, gauge readings
Truck unloading direct burn station secondary containment	Monthly	Check for cracks/gaps/damage
Truck unloading direct burn tanker	Weekly	Leaking, deterioration

Inspection Item	Minimum Frequency	Types of Problems
	(when not in use)	
Truck unloading direct burn station	Daily (when in use)	Check for the presence of combustible debris
Truck unloading direct burn station eyewash	Weekly	Operable
Truck unloading direct burn station pad shower	Weekly	Operable
Sludge Tanks T-401 and T-406		
T-401 sump SP-620	Daily	Empty
T-406 sump SP-618	Daily	Empty
T-401	Daily	Nitrogen blanket, leaking piping, waste levels
T-406	Daily	Leaking pump(s)
sludge pit O ₂ instrument/alarm	Monthly	Calibrate, alarm audible
sludge pit O ₂ instrument/alarm	Weekly	Instrument operable
T-401 integrity	Daily	No visible leaks, check for corrosion
T-406 integrity	Daily	No visible leaks, check for corrosion
T-401 and T-406 interior inspection	Every Four Years	Inspect interior of each tank for pitting, corrosion, general condition, thickness
T-406 berm (secondary containment system)	Monthly	Concrete free of gaps/cracks, clean
T-401 berm (secondary containment system)	Monthly	Concrete free of gaps/cracks, clean
T-401 waste level	Daily	Acceptable, record
T-406 waste level	Daily	Acceptable, record
valves for T-401 & T-406	Daily	Leaks

Inspection Item	Minimum Frequency	Types of Problems
The sludge receiving tank fixed roof and its closure devices	Annually	Check for defects such as cracks, holes, gaps, broken, cracked, or otherwise damages seals, broken or missing hatches, access covers, caps, or other closure devices, etc.
T-406 berm eyewash	Weekly	Operable
T-406 berm shower	Weekly	Operable
Bulk Solids Tanks		
T-403 waste level	Daily	Acceptable
T-404B waste level	Daily	Acceptable
T-404A waste level	Daily	Acceptable
T-403, T404A, T-404B interior inspection	Every Four Years	Inspect interior of each tank for pitting, corrosion, general condition, thickness
Bulk Solids Tunnel		
T-403	Daily	Evidence of leak
T-404B	Daily	Evidence of leak
T-404A	Daily	Evidence of leak
Tunnel concrete	Monthly	Visually free of cracks/gaps, clean
Bulk Solids Unloading Berm		
Bulk solids unloading area	Daily (when in use)	Spills
Concrete	Monthly	Free of cracks/gaps, clean
Sump SP-617	Daily	Empty
Alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible

Inspection Item	Minimum Frequency	Types of Problems
Sludge System Unloading Berm		
Sludge unloading area	Daily (when in use)	Spills
Concrete	Monthly	Free of cracks/gaps, clean
Truck Unloading (E-14)		
Truck unloading areas	Daily (when in use)	Spills
West bay concrete	Monthly	Visually free of cracks/gaps/damage
Middle bay concrete	Monthly	Visually free of cracks/gaps/damage
E-14 sumps (3)	Daily	Empty
Sump SP-309	Daily	Empty
Hoses/fittings	Daily	Good condition
Piping	Daily	No leaks observed from truck unloading to tank farm
Pumps (P302A,B,C)	Daily	No leaks/drips observed
Alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible
Truck unloading LEL alarms	Monthly	Calibrate, alarms audible
Truck unloading LEL alarms	Weekly	Instrument operable
Eyewashes	Weekly	Operable
Showers	Weekly	Operable
Thaw Shed		

Inspection Item	Minimum Frequency	Types of Problems
Spill Kit	Quarterly	Verify contents
Fire Station		
Spill Kit	Quarterly	Verify contents
Container Building		
Spill Kit	Quarterly	Verify contents
Tank Farm Pump Houses (E-15 and E-16)		
E-15 sump	Daily	Empty
P306A	Daily	Check for leaking
P306B	Daily	Check for leaking
P303A, B	Daily	Check for leaking
E-15 nitrogen blankets for T-301 through T-324	Daily	Blanket present
E-15 piping and headers	Daily	Check for leaking, empty drip pans
E-15 containment area	Daily	Spills
E-15 eyewash	Weekly	Operable
E-15 shower	Weekly	Operable
E-15 containers	Weekly	Closed container; label is current; no leaks; <90 days
E-15 concrete floor	Monthly	Free of cracks/gaps/damage
E-15 alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible
E-15 LEL alarms	Monthly	Calibrate, alarms audible
E-15 LEL alarms	Weekly	Instrument operable
E-16 sump	Daily	Empty

Inspection Item	Minimum Frequency	Types of Problems
P304A	Daily	Check for leaking
P304B	Daily	Check for leaking
P312	Daily	Check for leaking
E-16 piping and headers	Daily	Check for leaking, empty drip pans
E-16 containment area	Daily	Spills
E-16 eyewash	Weekly	Operable
E-16 shower	Weekly	Operable
E-16 containers	Weekly	Closed container; label is current; no leaks; <90 days
E-16 concrete floor	Monthly	Free of gaps/cracks/damage
E-16 alarms (plant alarms for fire, evacuation, and paging system)	Weekly	Alarms audible
E-16 LEL alarms	Monthly	Calibrate, alarms audible
E-16 LEL alarms	Weekly	Instrument operable
Tank Farm (T-301-312 and T-321-324)		
T-301-312 and T-321-324 seal pots and overflows	Daily	Check level of liquid and signs of waste
T-301-312 and T-321-324 integrity	Daily	Check if tank is leaking, check for corrosion
T-301-312 and T-321-324 tank temperatures, waste levels, valve positions	Daily	Acceptable, record
T-301-304, T-305-308, T-309-312, and T-321-324 berm floors	Monthly	Check for cracks/gaps/damage
T-301-304, T-305-308, T-309-312, and T-321-324 berm walls	Monthly	Check for cracks/gaps/damage
T-301-312 and T-321-324 interior inspection	Annual	Inspect interior of each tank for pitting, corrosion, general condition, thickness
Sumps SP-310A, B, C, and D	Daily	Empty

Inspection Item	Minimum Frequency	Types of Problems
lower T-323-324 shower/eyewash	Weekly	Operable
upper T-322-321 shower/eyewash	Weekly	Operable
lower T-303-304 shower/eyewash	Weekly	Operable
upper T-303-304 shower/eyewash	Weekly	Operable
lower T-309-310 shower/eyewash	Weekly	Operable
upper T-309-310 shower/eyewash	Weekly	Operable
Tank Farm Carbon Canister Fume Management System		
condensation traps	Weekly	liquid accumulation
hydrocarbon sensor ports	3 hrs (when in use)	Breakthrough
carbon canisters	3 hrs (when in use)	Temperature
Combustion Air System Inspection		
Shredder vent duct	Daily	Check for presence of dust or liquids
Bulk solids building vent	Daily	Check for presence of dust or liquids
North ABC combustion air duct	Daily	Check for presence of dust or liquids
South ABC combustion air duct	Daily	Check for presence of dust or liquids
Kiln combustion air silencer	Daily	Check for presence of dust or liquids
Drain valves/traps, Bottom of kiln, Combustion air silencer	Daily	Open and drain any liquids; record amount drained
Sludge X122	Daily	Open, drain, record
Decant X121	Daily	Open, drain, record
Kiln X120	Daily	Open, drain, record

Inspection Item	Minimum Frequency	Types of Problems
Trap X311	Daily	Open, drain, record
The closed vent system between the bulk solids building, the shredder, the apron feeder, the sludge receiving tank and the inlet to the ID fans (both kiln/ABC combustion air fans and the carbon adsorption system ID fan)	Annually	Check for leaks, holes, gaps, loose connections, etc. that could lead to emissions
The duct work sections between the carbon adsorption system ID fan (K-401) and the carbon adsorbers, and between the combustion air fans (K-101 and K-102A/B) and the incinerator	Annually	No detectable emissions (Method 21), defects that could lead to emissions
Carbon Adsorption Vessels F-412A/B	Annually	Check for leaks, holes, gaps, that could cause emissions
Kiln Area		
Kiln/ABC berm	Daily	Clean; free of spills
kiln/ABC and associated equipment (including feed conveyors, deslagger, piping, etc.)	Daily	Fugitive emissions, deterioration, excessive wear, signs of tampering, leaks, spills
Sump SP-624	Daily	Empty
Sump SP-615	Daily	Empty
Eyewashes	Weekly	Operable
Showers	Weekly	Operable
Slag Pad Area		
Sump SP-623	Daily	Empty
Eyewash	Weekly	Operable
Shower	Weekly	Operable
Wet End I Area		
Sump SP-629	Daily	Empty
Sump SP-614B	Daily	Empty

Inspection Item	Minimum Frequency	Types of Problems
Sump in dust loadout	Daily	Empty
Wet End I equipment (pumps, piping, valves, tanks, etc.)	Daily	Fugitive emissions, deterioration, excessive wear, signs of tampering, leaks, spills
Sump SP-614A	Daily	Empty
Eyewashes	Weekly	Operable
Showers	Weekly	Operable
Wet End II Area		
Soda Ash Sump SP-614D	Daily	Empty
Sump SP-616	Daily	Overflowing, pump operable
WESP Sump SP-614C	Daily	Empty
Wet End II equipment (pumps, piping, valves, tanks, etc.)	Daily	Fugitive emissions, deterioration, excessive wear, signs of tampering, leaks, spills
Eyewashes	Weekly	Operable
Showers	Weekly	Operable
CEM system	Daily	Sample transport and interface system, CEMS calibration data
Emergency Equipment		
Emergency Generator	Weekly	Start generator, operable, check oil & gas
primary electric fire pump	Weekly	Start pump, operable
secondary diesel fire pump	Weekly	Start pump, operable
Safety and Security		
Fence	Weekly	All gates closed and locked, poles upright, no holes that would allow unauthorized entry

Inspection Item	Minimum Frequency	Types of Problems
Warning signs	Weekly	Are signs secured to fence? Are signs visible and legible?
perimeter lighting	Weekly	Check for lights working
all fire extinguishers plant wide	Monthly	Tagged, charged, in place, damaged
evacuation drills	Quarterly	Check for proper response
Instrumentation		
kiln temperature TT 1005 A,B	Daily	Good working order, out of tolerance, recording properly
ABC temperature TE/TT 1009 A,B,C	Daily	Good working order, out of tolerance, recording properly
Stack CO AE/AT 2199 A,B,C	Daily	Good working order, out of tolerance, recording properly
Gas velocity FE/FT 2195	Daily	Good working order, out of tolerance, recording properly
combustion zone pressure PIT 1006 A,B,C	Daily	Good working order, out of tolerance, recording properly
baghouse pressure drop PIT 2020 A,B	Daily	Good working order, out of tolerance, recording properly
WESP power JR 2181 A,B	Daily	Good working order, out of tolerance, recording properly
1st stage flow FT 2092A/B	Daily	Good working order, out of tolerance, recording properly
2nd stage flow FT 2095A/B	Daily	Good working order, out of tolerance, recording properly
1st stage pH AE/AT 2104 A,B	Daily	Good working order, out of tolerance, recording properly
2nd stage pH AE/AT 2130 A,B	Daily	Good working order, out of tolerance, recording properly
2nd stage effluent pH AE/AT 2129 A,B	Daily	Good working order, out of tolerance, recording properly
saturator flow FT 2081A/B	Daily	Good working order, out of tolerance, recording properly
spray dryer gas temperature TE/TT 2001 A,B,C	Daily	Good working order, out of tolerance, recording properly
saturator gas temperature TE/TT 2082 A,B,C	Daily	Good working order, out of tolerance, recording properly
hot duct O ₂ AT 1010 A,B	Daily	Good working order, out of tolerance, recording properly

Inspection Item	Minimum Frequency	Types of Problems
kiln rotation ST1003	Daily	Good working order, out of tolerance, recording properly
secondary air pressure PT 1018	Daily	Good working order, out of tolerance, recording properly
Vent position ZSC 1017	Daily	Good working order, out of tolerance, recording properly
atomization air differential pressure PDSL 1124, 1187, 1224	Daily	Good working order, out of tolerance, recording properly
waste liquid pressure PSL 1119A, 1119B, 1196	Daily	Good working order, out of tolerance, recording properly
combustion air pressure PSL 1127, PI 1191, 1244	Daily	Good working order, out of tolerance, recording properly
BMS operating A104M, A106AM, A106BM	Daily	Good working order, out of tolerance, recording properly